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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/683,604	10/10/2003	James A. Davis	P03080US1A(P362)	1011

7590 08/31/2004

Chief Intellectual Property Counsel  
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Akron, OH 44317-0001

EXAMINER

VALENTI, ANDREA M

ART UNIT	PAPER NUMBER
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3643

DATE MAILED: 08/31/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/683,604	<b>Applicant(s)</b> DAVIS ET AL.	
	<b>Examiner</b> Andrea M. Valenti	<b>Art Unit</b> 3643	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 June 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 18-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Election/Restrictions***

Applicant's election without traverse of Group 1 (Claims 1-17) in the reply filed on 25 June 2004 is acknowledged.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-7, 10, and 14-17 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,854,327 to Davis et al

Regarding Claims 1 and 10, Davies teaches an aquaculture and method (Davis Col. 16 line 1, 2, and 4) comprising: a liner material including at least one ethylene-propylene-diene terpolymer (EPDM) (Davis Col. 4 line 28-30), wherein said EPDM liner material is cured by utilizing a curing agent and at least one thiazole accelerator (Davis Col. 8 line 31) and at least one accelerator selected from the group consisting of dithiocarbamate (Davis Col. 8 line 27) accelerators and guanidine accelerators, and is devoid of thiuram accelerators (Davis abstract); inherently water contacting said liner material; and aquatic animals in said water (Davis Col. 16 line 4), inherently wherein a majority of the animals remain viable in said water for at least 7 days.

Art Unit: 3643

Regarding Claims 3 and 14, Davis inherently teaches the ethylene-propylene-diene terpolymer is amorphous having less than 1 percent crystallinity.

Regarding Claims 4 and 15, Davis teaches the liner material further includes at least one filler selected from the group consisting of carbon black, ground coal, calcium carbonate, clay, silica, mica, talc and cryogenically ground rubber (Davis Col. 5 line 51-56).

Regarding Claim 5, Davis teaches the filler includes at least one carbon black (Davis Col. 1 line 52).

Regarding Claims 6 and 17, Davis teaches the liner material further includes at least one processing oil selected from the group consisting of paraffinic oils, naphthenic oils and mixtures thereof (Davis Col. 7 line 66).

Regarding Claims 7 and 16, Davis teaches the curing agent is sulfur (Davis 8 line 23).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,854,327 to Davis et al in view of U.S. Patent No. 5,584,991 to Wittstock et al.

Art Unit: 3643

Regarding Claims 2 and 13, Davis is silent on at least one of ammonia oxidizing bacteria and nitrite oxidizing bacteria are contacted with said water, and wherein said bacteria are biologically active in the water. However, Wittstock teaches a fish safe EPDM lined aquaculture system (Wittstock Col. 2 line 60-61) utilizing biologically active bacteria in the water (Wittstock Fig.1 #84 and Col. 6 line 31, 54, and 60). It would have been obvious to one of ordinary skill in the art to modify the teachings of Davis with the teachings of Wittstock at the time of the invention to as an environmentally friendly means of keeping the water clear.

Claims 8, 9, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,854,327 to Davis et al

Regarding Claims 8 and 11, Davis is silent on the water being salt water. However, it would have been obvious to one of ordinary skill in the art to modify the teachings of Davis at the time of the invention depending on the needs of the aquatic life placed in the pond.

Regarding Claims 9 and 12, Davis is silent on the aquatic animals are selected from the group consisting of shrimp and crayfish. However, it would have been obvious to one of ordinary skill in the art to modify the teachings of Davis at the time of the invention since the modification is merely the selection of a particular fish/aquatic life to meet aesthetic or production needs and does not present a patentably distinct limitation.

Art Unit: 3643

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Japanese Patent JP 05176654; U.S. Patent No. 5,804,661; U.S. Patent No. 5,703,154; U.S. Patent No. 4,128,523; U.S. Patent No. 5,700,538; U.S. Patent No. 3,998,186; U.S. Patent No. 4,589,804; U.S. Patent No. 5,468,550.

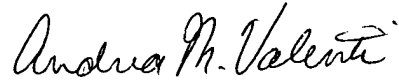
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrea M. Valenti whose telephone number is 703-305-3010. The examiner can normally be reached on 7:30am-5pm M-F; Alternating Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Poon can be reached on 703-308-2574. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 3643

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Andrea M. Valenti  
Patent Examiner  
Art Unit 3643

17 August 2004



Peter M. Poon  
Supervisory Patent Examiner  
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